



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,466	01/16/2001	Masayuki Yamagishi	PF-2732/NEC/US/mh	5013

466 7590 03/25/2004

YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

BAHTA, KIDEST

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,466

Applicant(s)

YAMAGISHI, MASAYUKI

Examiner

Kidest Bahta

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4-7 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi (U.S. patent 5,282,139).

Regarding claims 1 and 6, Kobayashi discloses a method of managing manufacturing processes including at least a batch-process for a batch which comprises plural product lots by at least a batch-manufacturing apparatus, the method comprising the steps of: transferring a loading request from the batch-manufacturing apparatus to a host computer (column 2, lines 55-59; Fig. 1 element 1 and 3); retrieving batch-processable product lots by the host computer to form a batch of plural batch-processable product lots (column 7, lines 25-38); carrying the batch to the batch-manufacturing apparatus (column 4, lines 15-17); verifying by the batch-manufacturing apparatus whether or not a lot number of the batch reaches a predetermined maximum batch-lot number (column 2, column 42-47; column 5, lines 8-21; column 8, lines 35-61; Fig. 7); sending an additional loading request from the batch-manufacturing apparatus to the host computer (column 7, lines 40-51); retrieving by the host computer whether or not any further additional batch-processable product lot is present (column 7, lines

Art Unit: 2125

25-51); and carrying the additional batch-processable product lot to the batch-manufacturing apparatus to add the additional batch-processable product lot to the batch (column 8, lines 23-34).

Regarding claims 2 and 7, Kobayashi discloses the additional loading request is repeatedly sent to the host computer until the lot number of the batch reaches the predetermined maximum batch-lot number (column 8, lines 44-51).

Regarding claims 4 and 10, Kobayashi discloses the product comprises a semiconductor wafer, and one of the product lots comprises a plurality of the semiconductor wafer, and one of the batches comprises a plurality of the semiconductor wafer lot (Fig. 7 and Fig. 9).

Regarding claims 5 and 11, Kobayashi discloses the batch-manufacturing apparatus is capable of batch-processing the plural semiconductor wafers in the single batch (Fig. 8 and Fig. 10).

Regarding claim 9, Kobayashi discloses the system has plural blocks, each of which has at least one of the stoker(element 3) and the batch-manufacturing apparatus (elements 5-1...5-N), and at least one of the carrier is allocated to each of the plural blocks (Fig. 1), and the host computer retrieves the wafer lots in each of the plural blocks and also controls each of the carriers in each of the plural blocks (column 7, lines 1-23; .

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

Art Unit: 2125

be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (U.S. patent 5,282,139) in view of Kim (U.S. Patent 5,997,656).

Regarding claims 3 and 8, Kobayashi discloses the limitation of claims 1 and 6 as stated above in Par. 2 and when the lot number of the batch reaches the predetermined maximum batch-lot number or when a transmission of the additional loading request is not in time for initiating the batch-process by the batch-manufacturing apparatus (column 8, lines 23-51). However, Kobayashi fails to disclose a delete request for deleting the additional loading request is sent from the batch-manufacturing apparatus to the host computer. Kim discloses a delete request for deleting (step S40) the additional loading request is sent from the batch-manufacturing apparatus to the host computer (column 4, lines 10-65).

It would have been obvious to a person of the ordinary skill in the art at the time invention was made to combine the teachings of Kobayashi with the teachings of Kim in order to provide wet processing equipment in which lots at an input port unit can be automatically and rapidly unloaded without any intervention of an operator in the event of an emergency, and thereby prevent unforeseen operational problems.

Art Unit: 2125

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning communication or earlier communication from examiner should be directed to Kidest Bahta, whose telephone number is (703) 308-6103. Examiner can normally be reached on M-F from 7:30 a.m. to 4:00 p.m. EST. If attempts to reach examiner by phone fail, examiner's supervisor, Leo Picard, can be reached (703) 308-0538. Additionally, fax phones for Art Unit 2125 is (703) 746-7239. Any inquiry of a general nature or relating to status of this application should be directed to group receptionist at (703) 305-9600.

Kidest Bahta

March 18, 2004

A handwritten signature in black ink, appearing to read 'Kidest Bahta', is written over the date.